

REMARKS

Reconsideration and allowance of the present application based on the foregoing amendments and the following remarks are respectfully requested.

Claims 1-123 are currently pending in the present application. Of these claims, claims 1-76 stand rejected, and claims 77-123 are newly added.

I. Claim Objections

The Examiner's objection to claims 73 and 74 is noted. The dependency of claim 73 has been amended to obviate this objection.

II. Double Patenting

In response to the Examiner's double patenting rejection, filed with this Amendment is a Terminal Disclaimer. Accordingly, withdrawal of this rejection is respectfully requested.

III. Cheshire Does Not Teach the Counterflow Relationship Recited in Independent Claims 1, 24, 39 and 50

Independent claims 1, 24, 39 and 50 stand rejected as being anticipated by Cheshire (U.S. Patent No. 5,255,468). The amendments made herein to the independent claims are being provided to emphasize their distinctions over Cheshire.

The independent claims have been amended to recite an overlapping relationship between the inflow and outflow. For example, claim 1 has been amended to recite:

said airflow generator generating said inflow and said outflow in a counterflow relationship wherein, outside the device, an overlapping region of said inflow overlaps an overlapped region of said outflow and flows substantially counter to and immediately adjacent the overlapped region of said outflow.

This language in claim 1 defines a type of counterflow relationship between the inflow and outflow that requires an overlapping region of the inflow to (a) overlap an

overlapped region¹ of the outflow, and (b) flow substantially counter to and immediately adjacent the overlapped region of the outflow. Insects attracted to the outflow will use the outflow to find its source, which they believe is the location of prey. As a result of this relationship, insects attracted to the device by the outflow and intersecting the overlapping region of the inflow will be drawn into the insect trap. While the insects may meander somewhat in their flight path, it is believed that the overlapping relationship enhances the ability to capture insects.

This claimed relationship is completely lacking in Cheshire. The most relevant portion of Cheshire that describes how insects are drawn into its device is found at column 10, lines 3-47. Neither that portion of Cheshire nor any other portion of Cheshire discloses or even mentions the type of counterflow relationship recited in claim 1. Instead, Cheshire discloses that insects are drawn in from within a “killing zone” defined by point X in Fig. 4. No overlapping relationship is disclosed between the inflow in this “killing zone” and the outflow flowing out the bottom of the device in Cheshire.

Thus, for at least the reasons that Cheshire fails to teach or suggest the counterflow relationship between the inflow and the outflow as recited by claim 1, claim 1 is submitted to be patentable, and the Examiner is requested to withdraw the outstanding rejection against it. This arrangement is simply not disclosed or suggested by Cheshire.

Independent claim 24 is a method claim that recites:

wherein said inflow and said outflow are generated in a counterflow relationship wherein, outside the device, an overlapping region of said inflow overlaps an overlapped region of said outflow and flows substantially counter to and immediately adjacent the overlapped region of said outflow.

This language in claim 24 recites the same counterflow relationship as is recited in claim 1. Thus, claim 24 is likewise submitted to be patentable and the Examiner is requested to withdraw the rejection against it for at least the same reasons advanced above with respect to claim 1.

Independent claims 39 and 50 recite essentially the same limitations with respect to the counterflow relationship as claims 1 and 24, with the exception that claims 39 and 50 do not use the word “immediately adjacent” to characterize the relationship between

¹ The terms “overlapping” and “overlapped” are used to ensure coverage for embodiments where the inflow does not necessarily overlap the entire periphery of the outflow, and also cover arrangements where

- the overlapping regions of the inflow and the outflow. However, these claims otherwise define the same counterflow relationship and are submitted to be patentable over Cheshire for the same reasons advanced above with respect to claim 1. Thus, the Examiner is requested to withdraw the rejection against these additional independent claims.

IV. Additional Reasons for the Patentability of the Independent Claims

A. *Cheshire Has No Insect Attractant In Its Outflow*

It has been previously argued in the parent application, Serial No. 09/682,247, by the Applicants that Cheshire fails to disclose an outflow comprising an insect attractant, as is required by each of the independent claims. Those previous arguments are still maintained by the Applicants, and for the sake of brevity are not being repeated herein. The Examiner may refer back to the previously filed amendments/responses for the Applicants' arguments in this respect, including specifically the arguments asserting that the Board of Patent Appeals and Interferences' decision in the parent application with respect to the DeYoreo reference should be controlling as to the issue of whether a light bulb can provide the claimed insect attractant.

Further, to more specifically clarify that light, heat, or air motion cannot meet the insect attractant limitation of the independent claims, as the Examiner appears to be asserting, each of the independent claims has been amended to recite that its outflow comprises an insect attractant "dispersed therein." This clearly requires the insect attractant to be dispersed in the outflow as a part thereof. Clearly, light and heat cannot be part of a flow. Light can pass through an outflow, but it cannot flow with that outflow and be dispersed therein as part of it. Likewise, an outflow can be heated, but heat is not something that is dispersed into and be part of the outflow. With respect to air motion, motion of an outflow also cannot be considered something that is dispersed in and part of the outflow. Instead, motion of the outflow is motion of the flow itself, it is not something that is dispersed in and part of the outflow.² Thus, for at least these additional reasons, the independent

overlapping of the entire periphery of the outflow occurs.

² This should not be taken as meaning that the claim scope excludes arrangements wherein, in addition to having an insect attractant dispersed in it, the outflow is heated, used in conjunction with light, or has some motion imparted to it. Instead, the Applicants are only arguing that these things cannot be considered to be an insect attractant dispersed in the outflow.

claims are submitted to be patentable and the Examiner is requested to withdraw the outstanding rejections against them.

B. Commercial Success

Additionally, the Applicants are submitting a Declaration Under Rule 1.132 from Raymond Iannetta, the President of American Biophysics Corporation (“ABC”), establishing the commercial success of ABC’s innovative insect traps, which are the subject of this application. The attached Declaration is essentially an updated version of the Declaration filed in the parent application, Ser. No. 09/682,247 (referred to as the “original Declaration”). With respect to the Examiner’s assertions in the parent application that the original Declaration is insufficient to establish commercial success because it only mentions the apparatus described in the application, and not the specific claims, the attached Declaration specifically states that the traps sold are covered by the claims of the present application and provides updated information.

As to the Examiner’s assertion that the original Declaration filed in the parent application was lacking because it did not contain advertising data or information concerning market share, the Applicants submit that there is sufficient evidence in the attached Declaration to establish commercial success without the need for including such information. In fact, given the overwhelming commercial success of ABC’s traps and the characteristics of the marketplace as attested to in the attached Declaration, the Applicants submit that such information would not be particularly probative of the issue of commercial success. Additional evidence in support of this assertion is provided in the eighth and ninth paragraphs of the attached Declaration.

Specifically, in the original Declaration and the attached Declaration, Mr. Iannetta has testified that prior to the introduction of the American Biophysics traps, commercially available traps were priced in the range of \$50-80 dollars. Mr. Iannetta has further testified that, even in view of the availability of those low-priced traps, ABC’s innovative traps experienced tremendous commercial success at significantly higher price points. In fact, during the first four years of sales of the ABC traps, they were priced 10-25 times higher than other devices available on the marketplace (i.e., those mentioned above in the \$50-80 price range). In view of these facts, it is submitted that evidence of market share would not be particularly probative of the issue of commercial success, and commercial success should be found irrespective of what the market share of the American Biophysics

traps is. As stated in the attached Declaration, “[t]his is because comparing the higher priced ABC traps against the significantly lower priced prior devices in terms of market share is not a fair nor relevant comparison.” Likewise, the Applicants submits that data of advertising expenses also would not be meaningfully probative of the issue of commercial success. As is also stated in the attached Declaration, “given the nature of the marketplace, and particularly the significantly higher price of ABC’s innovative traps relative to other alternatives at the time of introduction, as a matter of common sense the commercial success could not be explained by advertising alone.” More specifically, the attached Declaration states that “no reasonable consumer is likely to pay many hundreds of dollars for an insect trap if a comparable one were available for less than one hundred dollars, no matter how effectively the higher priced trap is advertised.”

Instead, the important fact attested to by the both the original and attached Declarations in support of a finding of commercial success is that consumers have been willing to purchase the high-priced American Biophysics traps even when faced with the choice of purchasing significantly lower-priced devices. As stated by Mr. Iannetta in the attached Declaration:

Based on my experience in and understanding of the insect trap marketplace, this commercial success of the ABC insect traps is directly attributable to the use of the relationship between the inflow and outflow of these traps that enables the ABC traps to effectively attract and capture insects better than the lower-priced alternatives. This is the same relationship recited in the independent claims of the present application.

The Applicants submit that the facts attested to by Mr. Iannetta based on his experience in and understanding of the insect trap marketplace are sufficient to establish commercial success of the ABC insect traps covered by the claims of the present application.

Thus, for this additional reason of commercial success, the Applicants submit that the independent claims are patentable over the art of record.

Further, attached is an Initial Determination issued by the International Trade Commission in a litigation concerning U.S. Patent No. 6,145,243, which is a continuation-in-part of U.S. Patent No. 6,286,249, which is the grandparent of the present application. In that Initial Determination, the Administrative Law Judge found ABC’s products to be commercially successful. See Initial Determination at 67, n. 1, and at 90-94. These products

- are the same products discussed in the attached Declaration. Thus, during that proceeding despite the contrary arguments of an accused infringer, an independent tribunal still found
- ABC's products to be commercially successful.

V. Patentability of the Dependent Claims

Claims 2-23, 25-30, 40-49 and 51-82 depend from independent claims 1, 24, 39 and 50. These dependent claims are submitted to be patentable at least based on such dependency, and also for the reason that they recite additional patentable subject matter.

Additionally, the Applicants continue to maintain the same arguments advanced in the previous response filed in the parent application, Ser. No. 09/682,247, with respect to the dependent claims, particularly against the combination of Cheshire and Waters. Specifically, the Applicants submit that Waters does not overcome the deficiencies of Cheshire discussed above. In particular, Waters does not teach or suggest anything at all with respect to a relationship between the inflow and outflow. As also discussed above, Cheshire does not teach anything about the outflow comprising an attractant or playing any role at all in the capture of insects. Thus, there is no motivation at all to combine the two references in the manner suggested in the Office Action.

The Office Action states that it would be obvious to supply the CO₂ above the fan points out the hindsight nature of the rejection. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990); MPEP § 2143.01 (emphasis in original). One of ordinary skill in the art would not read Cheshire to suggest putting a CO₂ source above the fan because Cheshire does not teach anything about using the outflow of the trap to lure insects. Cheshire operates by using a light lure to bring insects into the killing zone X shown in Fig. 4. Col. 10, ll. 3-21. The outflow at the lower housing 15 is merely an exhaust. Col. 8, ll. 56-65. Waters makes no mention at all of Cheshire-type light traps or of any fan at all. There is no teaching or suggestion in either reference that adding CO₂ to the exhaust of Cheshire is desirable. A motivation to combine the references is a requirement of the *prima facie* case of obviousness. MPEP § 2143.

Because there is no actual motivation to combine present in either of the two references, the Official Action has failed to set forth a *prima facie* case of obviousness.

- Applicants therefore respectfully request that the rejection based on Cheshire in view of Waters be withdrawn.

The Examiner is also requested to take the Declaration Under Rule 1.132 mentioned above into account with respect to the dependent claims, and particularly with respect to the issue of obviousness. The Declaration specifically states that the traps discussed therein are covered by “many dependent claims, including but not limited to dependent claims 22, 71, 77-82, 84, 105, 111, 113, 122 and 123.”

VI. New Claims

New claims 77-82 depend from the original dependent claims, and have already been discussed above.

New independent claims 83 and 112 are added to recite a specific relationship between the inflow and outflow which is not taught by Cheshire. These new independent claims, however, do not necessarily require the counterflow relationship characterized by overlapping regions of flow, as recited in claims 1, 24, 39 and 50. Instead, these claims recite a more generic relationship between the extent of the inflow and the elevational location of the outflow opening.

Claim 83 is a device claim reciting:

said airflow generator generating said inflow and said outflow such that, outside said device, said inflow extends substantially to or below an elevation of the outflow opening.

Likewise, claim 112 is a method claim reciting:

wherein said inflow and said outflow are generated such that, outside said device, said inflow extends substantially to or below an elevation of the outflow opening.

In each of these claims, the “inflow” is defined as extending “substantially to or below an elevation of the outflow opening.” The elevation of the outflow opening would be its elevation in the operative use position of the device. This arrangement significantly increases the likelihood of capturing insects with the inflow as they follow the outflow towards the device. Specifically, insects tend to meander as they follow the outflow, and by positioning the inflow so that it extends substantially to or below the elevation of the outflow

- opening, the chances of capturing an insect in the inflow are greatly enhanced relative to the device disclosed in Cheshire.

In Cheshire, the “killing zone” defined by point X in Fig. 4 is where its inflow is generated to capture insects. This “killing zone” clearly does not extend substantially to or below the elevation of the outflow opening. Instead, the “killing zone” in Cheshire is located quite far above the outflow opening in the context of the overall size of the device. Because Cheshire teaches that its inflow is within this killing zone, it cannot be regarded as teaching that its inflow extends substantially to or below the elevation of the outflow opening. Moreover, Cheshire does not provide any suggestion or motivation to modify its device so that its inflow, and hence its “killing zone” extends substantially to or below the elevation of its outflow opening.

Thus, for at least this reason, claims 83 and 112 are submitted to be patentable.

Additionally, claims 83 and 112 are submitted to be patentable for reciting that the outflow comprises “an insect attractant dispersed therein,” which was discussed above. Also, the attached Declaration of commercial success applies equally to claims 83 and 112, as well as other dependent claims, as noted by Mr. Iannetta.

Claims 84-111 and 113-123 depend from claims 83 and 112. These claims are submitted to be patentable both for their dependency on these claims and for the reason that they recite additional patentable features. Additionally, the arguments made for similar dependent claims in the parent application, and in particular those arguments against the combination of Cheshire and Waters, apply to these dependent claims.

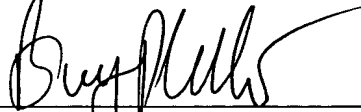
VII. Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance, and a Notice to that effect is earnestly solicited.

If the Examiner has any further issues with respect to this application, he is encouraged to telephone the undersigned at the below-listed telephone number in order to facilitate prosecution of this application.

Respectfully submitted,

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